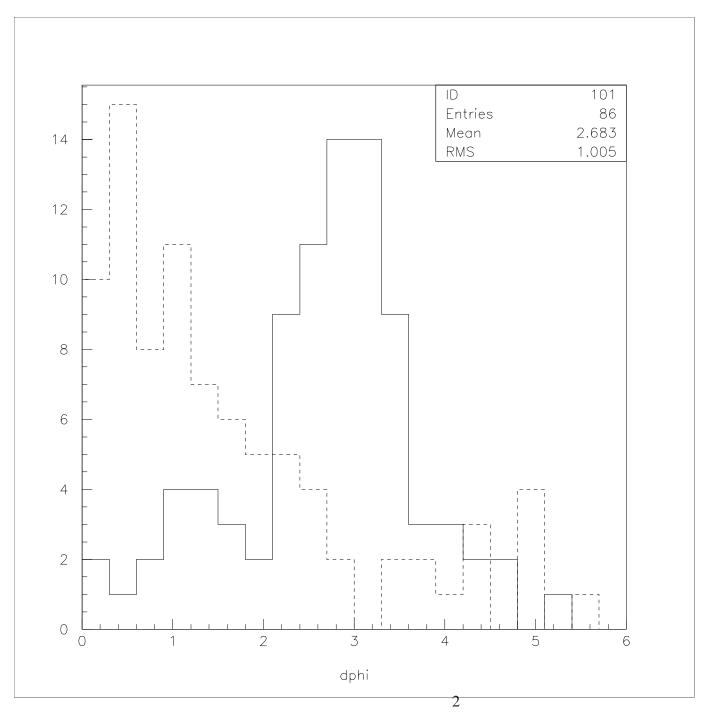
$\nu_{\mu}$  CC Interactions:  $\Delta \phi$  and Momentum Spectrum

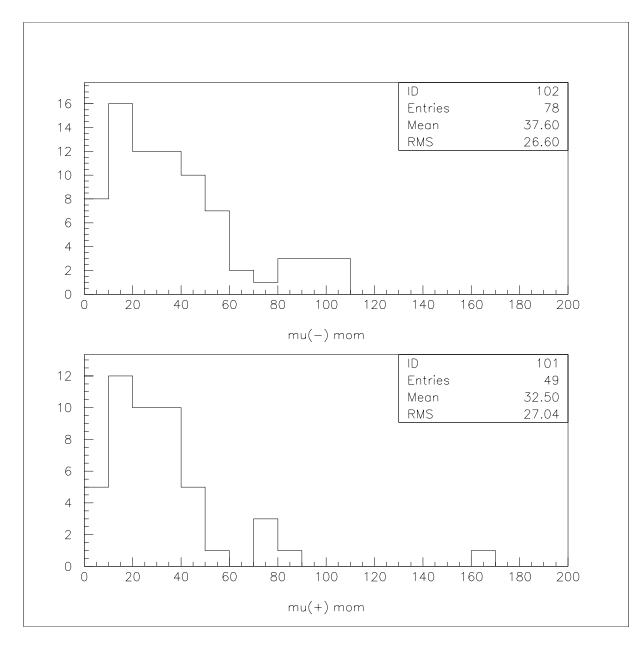
Phase 1 and 2 combined analysis



**Solid line:** data with correct assignment of muon

**Dashed:** same events but "muon" assigned randomly from recoil hadrons

Require at least 2 tracks in addition to  $muon (\geq 3 tracks)$ 



The ratio of detected muon neutrino interactions to antineutrino interactions is

$$N_{\mu}(-)/N_{\mu}(+) = 1.59 \pm 0.28$$